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APPLICATION NO.	ON NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,755	09/06/2003		Chen-Kuei Chung	64,600-120	9071
	7590	12/17/2004		EXAMINER	
SHAW PITT			STEPHENS, JUANITA DIONNE		
1650 Tysons F McLean, VA		l	ART UNIT	PAPER NUMBER	
,				2853	
	•		DATE MAII ED: 12/17/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)						
Office Action Summary		10/656,755	CHUNG ET AL.						
		Examiner	Art Unit	_					
		Juanita D. Stephens	2853						
Period fo	The MAILING DATE of this communication Reply	on appears on the cover sheet wi	th the correspondence address ·	••					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).									
Status		•							
1)⊠	Responsive to communication(s) filed on	Application filed 9/6/03.	•						
· —		This action is non-final.							
3)									
,_	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposit	ion of Claims								
4)⊠	Claim(s) 1-14 is/are pending in the application.								
5)□	4a) Of the above claim(s) is/are withdrawn from consideration. Claim(s) is/are allowed.								
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•	_								
·									
	ion Papers								
	•	aminer							
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.									
10)	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11)	The oath or declaration is objected to by t	, -							
•—	under 35 U.S.C. § 119								
_	Acknowledgment is made of a claim for fo	oreian nriority under 35 IISC &	: 119(a)_(d) or (f)						
•	☐ All b)☐ Some * c)☐ None of: 1.☐ Certified copies of the priority docu		1 1 9 (a) - (u) 01 (1).						
•	2. Certified copies of the priority docu		pplication No						
	3. Copies of the certified copies of the								
	application from the International E								
* 5	See the attached detailed Office action for	a list of the certified copies not	received.	•					
Attachmen		🗖 :							
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-94	•	Summary (PTO-413) s)/Mail Date	•					
3) Infor	mation Disclosure Statement(s) (PTO-1449 or PTO/ er No(s)/Mail Date		nformal Patent Application (PTO-152)						

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DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9, drawn to "A thermal bubble membrane actuator for ejecting liquid", classified in class 347, subclass 56.
- II. Claims 10-14, drawn to "A method of fabricating a thermal bubble membrane actuator", classified in class 29, subclass 890.1.
- 2. The inventions are distinct, each from the other because of the following reasons: Inventions of Group I and Group II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the bubble membrane actuator can be made by chemical mechanical polishing, sputtering, grit blasting, or micromachining.
- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
- 4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

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5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

- 6. A telephone call was made to Mr. Yitai Hu on 12/3/04 to request an oral election to the above restriction requirement, but did not result in an election being made.
- 7. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
- 8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juanita D. Stephens whose telephone number is (571) 272-2153. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

December 12, 2004

manita Alaphan

Juanita D. Stephens Primary Examiner Art Unit 2853